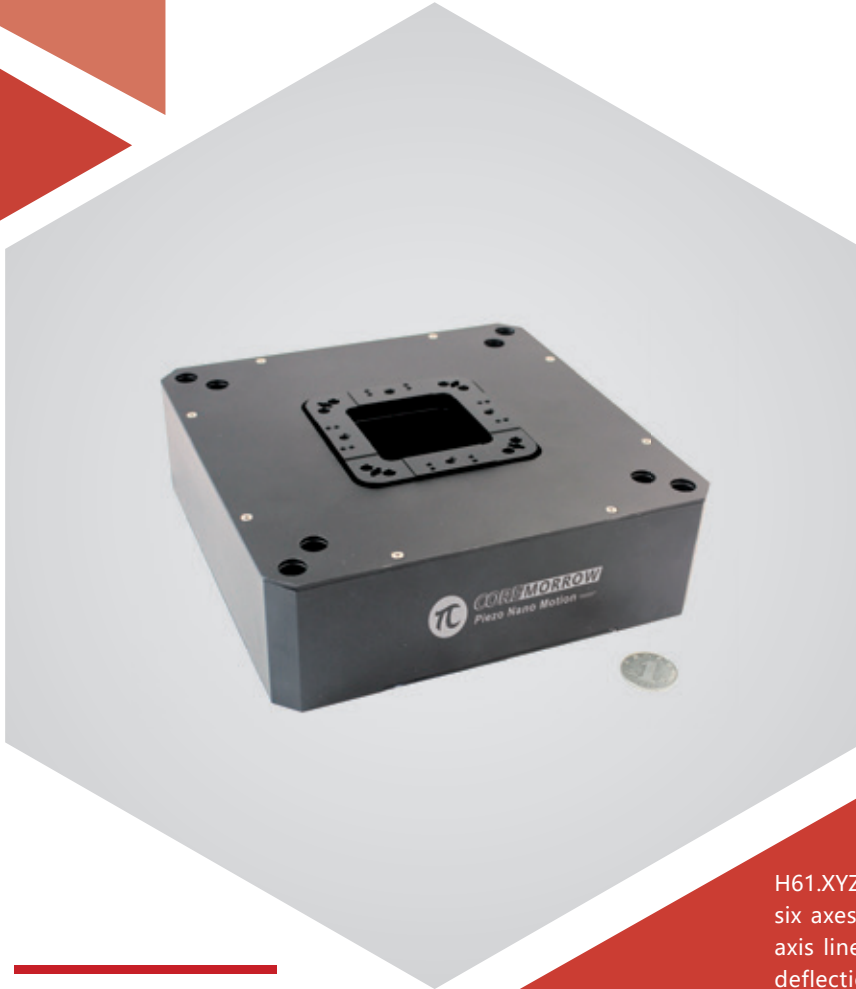


6 axes | H61.XYZTR0S/K-B2

Piezo XYZ/Tip/Tilt/Rotation Stage



Introduction

H61.XYZTR0S/K-B2 6-Axis Piezo Tilt Stage can produce six axes ultra-precision motion, suitable for static six-axis linear nano-positioning and angular nano-radian deflection. With a 50mm×50mm through hole in the center, it can be used for transmitted light applications.

Characteristics >>

- Motion in X, Y, Z, θ_x , θ_y , θ_z
- High load capacity
- Static use
- Optional closed loop sensor

Applications >>

- Optical beam scanning
- Light path adjustment
- Graphical stability
- Interference/metering
- Prism position adjustment
- Optical applications
- Transmitted light applications, etc.
- Six-axis ultra-precision position adjustment



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Technical Data >>

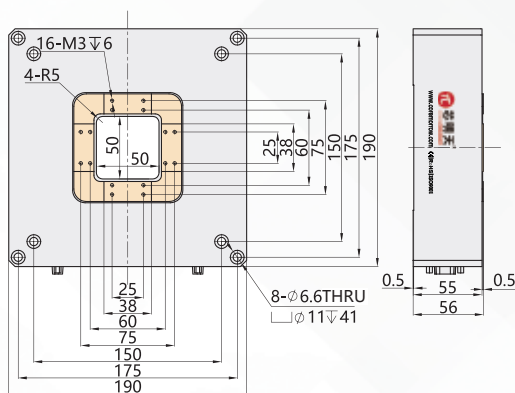
Type	H61.XYZTR0S-B2	H61.XYZTR0K-B2	Units
Active axes	X, Y, Z, θ_x , θ_y , θ_z	X, Y, Z, θ_x , θ_y , θ_z	
Driving channels	7	7	
XYZ Travel(0~120V)	XY100/axis, Z25	XY100/axis, Z25	$\mu\text{m}\pm 20\%$
XYZ Travel(0~150V)	XY125/axis, Z31	XY125/axis, Z31	$\mu\text{m}\pm 20\%$
Travel in $\theta_x\theta_y$ (0~120V)	± 0.2 /axis	± 0.2 /axis	$\text{mrad}\pm 20\%$
Travel in $\theta_x\theta_y$ (0~150V)	± 0.25 /axis	± 0.25 /axis	$\text{mrad}\pm 20\%$
Travel in θ_z (0~120V)	0.12	0.12	$\text{mrad}\pm 20\%$
Travel in θ_z (0~150V)	0.15	0.15	$\text{mrad}\pm 20\%$
Closed/open-loop resolution in θ_x , θ_y	0.5	0.5	μrad
Closed/open-loop resolution in θ_z	0.5	0.5	μrad
Closed/open-loop resolution in XY	<10	<10	nm
Closed/open-loop resolution in Z	2.5	2.5	nm
Linearity	0.2	0.2	%F.S.
Repeatability	0.1	0.1	%F.S.
Unloaded resonant frequency	150	150	Hz $\pm 20\%$
Resonant frequency at loading	70(@2kg)	70(@2kg)	Hz $\pm 20\%$
Sensor	SGS	-	
Load capacity	Upright 2, lateral 0.1, inverted 0.2	Upright 2, lateral 0.1, inverted 0.2	kg $\pm 5\%$
Central aperture	50x50	50x50	mm
Using way	Static	Static	
El. capacitance	XY:10.8/axis, Z: 14.4, $\theta_x\theta_y\theta_z$: 3.6/axis	XY:10.8/axis, Z: 14.4, $\theta_x\theta_y\theta_z$: 3.6/axis	$\mu\text{F}\pm 20\%$
Mass	< 3	< 3	kg $\pm 5\%$
Material	Steel, aluminum	Steel, aluminum	
Operating temperature ^[1]	-20~80	-20~80	$^{\circ}\text{C}$
Cable length ^[2]	1.5	1.5	m $\pm 10\text{mm}$
Sensor/voltage connector ^[2]	D-SUB	D-SUB	

Note: Technical data are measured by CoreMorrow E00/E01 series piezo controller. Max driving voltage could be -20V~150V, 0~120V is recommended for long-term and high-reliable operation. Unless otherwise specified, the above parameters are measured at room temperature about 25 $^{\circ}\text{C}$.

[1] Custom ultralow temperature and ultrahigh vacuum versions are available.

[2] Custom cable length and connector is available.

Note: The parallelism of the moving platform is about 20 μm , and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

Drawing >>

Recommended Controllers >>


E51.D7S
 7 channels, output voltage 0~120V
 Driving 6-axis motion piezo stage
 Software control



E01.A9
 1~9 channels, Open loop
 Analog input/ Software control
 Ave current 291mA



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